LIST OF CONTENTS

VOLUME 17 (1990)

Number 1

Tadimeti S. Rao, Patricia C. Contreras and Paul L. Wood	1	Commentary: Are *N*-methyl-D-aspartate (NMDA) and phencyclidine (PCP) receptors always functionally coupled to each other?
Frederick J. Monsma Jr, Leo G. Abood and Wayne Hoss	9	Differential desensitization of muscarinic receptor-stimulated phosphoinositide turnover in the rat brain
Hans Brockerhoff, Jesmael Zingoni and Susan Brockerhoff	15	Mechanism of anesthesia: anesthetics may restructure the hydrogen belts of membranes
Kyoji Morita, Kazuhiko Teraoka, Shuichi Hamano, Motoo Oka and Mami Azuma	21	Effects of bioflavonoids on catecholamine biosynthetic activity in the adrenal gland: *in vitro* studies using partially purified tyrosine hydroxylase and chromaffin cell cultures
J. Bothmer, M. Markerink and J. Jolles	27	Phosphatidic acid and polyphosphoinositide formation in a broken cell preparation from rat brain: effects of different incubation conditions
María Dolores Cánovas-Muñoz and Cecilio J. Vidal	35	Interactions between lectins and acetylcholinesterase from the sarcotubular system of skeletal muscle
Colleen A. Drew, Ian Spence and Graham A. R. Johnston	43	Effect of chronic exposure to lead on GABA binding in developing rat brain
I. Hájek and J. Teisinger	53	Na^+, K^+ ATPase activity in membrane fractions of rat central and peripheral nervous tissues modified by opioids
Toshihiro Aiuchi, Yoshihiro Shirane, Hiroyasu Kinemuchi, Yuichiro Arai, Se Kyung Kim, Kazuyasu Nakaya and Yasuharu Nakamura	59	Effect of the tetraphenylboron ion on the inhibition of mitochondrial respiration in synaptosomes by the 1-methyl-4-phenylpyridinium ion (MPP^+)
Makoto Muramatsu, Chika Usuki-Ito and Hironaka Aihara	67	[^{3}H]Minaprine binding to membrane preparation from rat brain
Lillian E. Dyck	77	Effects of dopamine on phosphoinositide hydrolysis in slices of rat striatum and cortex
A. Maurice and M. Malgat	83	Phosphatidylethanolamine–ceramide-ethanolaminephosphotransferase activity in synaptic plasma membrane vesicles: comparison with sialidase and ouabain-sensitive (Na^+, K^+)ATPase activities
Sumiko Abe-Dohmae, Jin-ichi Ito, Taiji Kato and Ryo Tanaka	93	Growth inhibition by sialosyl cholesterol of rat glioma cells
Serge N. Schiffmann and Jean-Jacques Vanderhaeghen	101	Immunocytochemical detection of GABAergic nerve cells in the human striatum and cerebellum using a gamma-aminobutyric acid antiserum
J. Alberch, E. Arenas, R. Sánchez Arroyos and J. Marsal	107	Excitatory amino acids release endogenous acetylcholine from rat striatal slices: regulation by gamma-aminobutyric acid
Gary Avendano, Bonnie Johnson Butler and P. Michael Iuvone	117	**A Rapid Publication: K^+-evoked depolarization induces serotonin N-acetyltransferase activity in photoreceptor-enriched retinal cell cultures. Involvement of calcium influx through L-type channels**
	127	**News Items**

Number 2

	i	Editorial
	iii	Foreword
M. R. G. Fischer, N. Limberger and K. Starke	129	The transmitter release pattern of serotonin axons in rabbit brain cortex slices during short pulse trains
U. Trendelenburg, C.-L. Schönfeld and E. Schömig	139	The efficiency of the neuronal re-uptake of noradrenaline—and the inhomogeneity of labelling of an incubated tissue
Siegfried Wurster, Roumen Nakov, Clemens Allgaier and Georg Hertting	149	Involvement of *N*-ethylmaleimide-sensitive G proteins in the modulation of evoked [^{3}H]noradrenaline release from rabbit hippocampus synaptosomes
J. G. Nicholls and D. P. Kuffler	157	Quantal release of serotonin from presynaptic nerve terminals
Karen B. Helle	165	Chromogranins: universal proteins in secretory organelles from Paramecium to man
Neville N. Osborne and Nigel L. Barnett	177	What constitutes a serotonergic neurone in the retina?
E. Muscholl	189	The role of vagus activity in the presynaptic control of noradrenaline release from rabbit atria
B. F. X. Reber, H. Porzig, C. Becker and H. Reuter	197	Depolarization-induced changes of free intracellular Ca^{2+} concentration and of [^{3}H]dopamine release in undifferentiated and differentiated PC12 cells
A. Claudio Cuello, Erik P. Pioro and Alfredo Ribeiro-da-Silva	205	Cellular and subcellular localization of nerve growth factor receptor-like immunoreactivity in the rat CNS
G. Banchelli, F. Buffoni, J. Elliott and B. A. Callingham	215	A study of the biochemical pharmacology of 3,5-ethoxy-4-aminomethylpyridine (B24), a novel amine oxidase inhibitor with selectivity for tissue bound semicarbazide-sensitive amine oxidase enzymes
Hans Herken	223	Neurotoxin-induced impairment of biopterin synthesis and function: initial stage of a Parkinson-like dopamine deficiency syndrome
H. Kewitz, K. L. Rost, O. Pleul and A. Handke	239	Dose-related effects of nerve growth factor (NGF) on choline acetyltransferase (ChAT), acetylcholine (ACh) content and ACh turnover in the brain of newborn rats
Hans Winkler and Reiner Fischer-Colbrie	245	Common membrane proteins of chromaffin granules, endocrine and synaptic vesicles: properties, tissue distribution, membrane topography and regulation of synthesis
Christian Pifl, Oswald Bertel, Günther Schingnitz and Oleh Hornykiewicz	263	Extrastriatal dopamine in symptomatic and asymptomatic rhesus monkeys treated with 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP)
Jean Himms-Hagen, Jingying Cui and S. Lynn Sigurdson	271	Sympathetic and sensory nerves in control of growth of brown adipose tissue: effects of denervation and of capsaicin
G. Schulze, H. Coper and Ch. Fähndrich	281	Adaptation capacity of biogenic amines turnover to hypoxia in different brain areas of old rats
Menek Goldstein	291	Studies on catecholamine-synthesizing enzymes
R. Casteels, G. Droogmans and L. Missiaen	297	Agonist-induced entry of Ca^{2+} in smooth muscle cells

Marianne Fillenz	303	Regulation of catecholamine synthesis: multiple mechanisms and their significance
P. Watkins, A. Clow, Vivette Glover, J. Halket, A. Przyborowska and M. Sandler	321	Isatin, regional distribution in rat brain and tissues
Ph. Janssens de Varebeke, E. Schallauer, W. D. Rausch, P. Riederer and M. B. H. Youdim	325	Milacemide, the selective substrate and enzyme-activated specific inhibitor of monoamine oxidase B, increases dopamine but not serotonin in caudate nucleus of rhesus monkey
Bo Wängberg, Håkan Ahlman, Ola Nilsson, Kenneth Haglid, Richard M. Denney and Annica Dahlström	331	Amine handling properties of human carcinoid tumour cells in tissue culture
Å. Dagerlind, M. Schalling, P. Eneroth, M. Goldstein and T. Hökfelt	343	Effects of reserpine on phenylethanolamine *N*-methyltransferase mRNA levels in rat adrenal gland: role of steroids
G. Burnstock	357	Noradrenaline and ATP as cotransmitters in sympathetic nerves
	369	News Items
	371	Corrigendum

Number 3

Ruth E. Rosenstein and Daniel P. Cardinali	373	Commentary: Central GABAergic mechanisms as targets for melatonin activity in brain
Sara Fiszer de Plazas and Alba Mitridate de Novara	381	Effect of diazepam on the low affinity GABA binding sites at different developmental stages of the chick optic lobe
Yi-Ping Li and John B. Lombardini	389	Taurine inhibits the phosphorylation of two endogenous proteins (M_r ~140 and ~20 K) in subcellular preparations of rat cortex
P. P. Gonçalves, M. S. Santos and A. P. Carvalho	401	Ionic requirements for transport and release of [^{3}H]GABA by synaptic plasma membrane vesicles
M. L. Vizuete, M. Santiago, A. J. Herrera, A. Machado and J. Cano	415	Neonatal enucleation alters catecholamine and serotonin metabolism in the lateral geniculate and visual cortex in developing rats
Christine Blazynski, Gerald DeVries, Kathleen Geary, Adolph I. Cohen and James A. Ferrendelli	425	Regulation of cyclic AMP levels in mammalian retina: effects of depolarizing agents and transmitters
Carl P. LeBel and Stephen C. Bondy	435	Sensitive and rapid quantitation of oxygen reactive species formation in rat synaptosomes
V. K. Paliwal, P. L. Iversen and M. Ebadi	441	Regulation of zinc metallothionein II mRNA level in rat brain
Jang-Yen Wu, J. Y. Liu, C. T. Lin, Diane Evans and W. H. Tsai	449	Immunoaffinity purification of L-glutamate decarboxylase
R. Alonso, J. P. Kan, P. Worms and P. Soubrié	457	Effects of repeated administration of tetrahydroaminoacridine (THA) on muscarinic receptor subtypes in the rat brain
Ash K. Dwivedy	467	Density of sodium channels in insect synaptic nerve endings

Connie S. Tamura and Robert C. Speth — 475 Effects of angiotensin II on phosphatidylinositide hydrolysis in rat brain

S. Regunathan and T. L. Sourkes — 481 Effect of α-methylserotonin on serotonin receptor-coupled phosphoinositide breakdown in rat cerebral cortex

Elisabeth Nilsson and Jan-Olof Karlsson — 487 Slow anterograde axonal transport of calpain I and II

S. E. Jones, H. G. Wood-Gush, J. R. Cunningham, P. J. Szczesny and M. J. Neal — 495 Abnormalities in expression of human retinal mRNA in retinitis pigmentosa

505 Book Reviews

507 News Items

Number 4

Charles W. Bradberry, Jeffrey S. Sprouse, George K. Aghajanian and Robert H. Roth — 509 3,4-Methylenedioxymethamphetamine (MDMA)-induced release of endogenous serotonin from the rat dorsal raphe nucleus *in vitro*: effects of fluoxetine and tryptophan

Philip P. Godfrey, Zahra Taghavi, Helen Parfrey and David G. Grahame-Smith — 515 Differential effects of lithium on agonist-stimulated inositol polyphosphate formation in rat cerebral cortex slices: selective actions on muscarinic cholinergic responses

Raquel P. Sen, Esmerilda G. Delicado and M. Teresa Miras-Portugal — 523 Effect of forskolin and cyclic AMP analog on adenosine transport in cultured chromaffin cells

Grace Y. Sun, Fu-Gen Yoa and Teng-Nan Lin — 529 Degradation of poly-phosphoinositides in brain subcellular membranes in response to decapitation insult

Georges Vauquelin, Hilde De Vos, Jean-Paul De Backer and Guy Ebinger — 537 Identification of α_2 adrenergic receptors in human frontal cortex membranes by binding of [^{3}H]RX 821002, the 2-methoxy analog of [^{3}H]idazoxan

M. Costa, L. Vesci, M. Fontana, S. P. Solinas, S. Dupre and D. Cavallini — 547 Displacement of [^{3}H]GABA binding to bovine brain receptors by sulfur-containing analogues

I. Boekhoff and H. Breer — 553 Differential stimulation of second messenger pathways by distinct classes of odorants

Kuniko Okumura-Noji, Taiji Kato, Jin-ichi Ito, Tatsuo Suzuki and Ryo Tanaka — 559 Stimulation by glia maturation factor of Ca^{2+}-dependent phosphorylation of M_r 100 k protein in rat glioblasts

Ngoc-Anh Do Thi, Jean-Marie Bourre, Herbert L. Koenig, Valérie Trouillet, Odile Dumont and Michèle Piciotti — 573 Alteration of ethanolamine glycerophospholipid turnover in Trembler dysmyelinating mutant: an analysis of the sciatic nerve by biochemistry and radioautography

Yuichiro Arai, Se Kyung Kim, Hiroyasu Kinemuchi, Takeshi Tadano, Shinetsu Satoh, Nobunori Satoh, Katsuyuki Oyama and Kensuke Kisara — 587 Selective inhibition of MAO-A in serotonergic synaptosomes by two amphetamine metabolites, *p*-hydroxyamphetamine and *p*-hydroxynorephedrine

Eva R. Pietrzak, Peter A. Wilce and Brian C. Shanley — 593 Effects of chronic ethanol treatment and aging on brain phosphoinositide turnover and adenylate cyclase activity

M. Alberghina and R. M. Gould — 599 Levels of choline intermediates in the visual system structures and in peripheral nerve of the rat: comparison with neural tissues of a lower vertebrate (*Mustelus canis*) and an invertebrate (*Loligo pealei*)

J. Frias, E. Ruiz, E. Rodriguez and E. Ortega — 605 Effect of CRF in the median eminence on gonadotropin levels in conscious female rats

Klaus Slenzka, Ramona Appel and Hinrich Rahmann — 609 Influence of exogenous gangliosides (G_{M1}, G_{Dla}, G_{Mix}) on a Ca^{2+}-activated Mg^{2+}-dependent ATPase in cellular and subcellular brain fractions of the djungarian dwarf hamster (*Phodopus sungorus*)

S. C. Bondy, M. McKee and J. Martin — 615 The effect of oxidative stress on levels of cytosolic calcium within and uptake of calcium by synaptosomes

Akira Ishii, Masako Hagihara, Sadao Matsuura, Kohichi Uchida, Kazutoshi Kiuchi, Norio Kaneda, Shigeo Toya, Shinichi Kohsaka and Toshiharu Nagatsu — 625 A Rapid Publication: Effect of (6*R*)- and (6*S*)-tetrahydrobiopterin on L-3,4-dihydroxyphenylalanine (DOPA) formation in NRK fibroblasts transfected with human tyrosine hydroxylase type 2 cDNA

633 Book Reviews

639 News Items